DRAFT
FINDING OF NO PRACTICABLE ALTERNATIVE

THIS PAGE INTENTIONALLY LEFT BLANK.

DRAFT FINDING OF NO PRACTICABLE ALTERNATIVE REGARDING BAX & CACTF SITING

Introduction

The Army has selected the Eddy Drop Zone location (Alternative 2) for the construction of the Battle Area Complex (BAX) and Combined Arms Collective Training Facility (CACTF) ranges.[1] The Eddy Drop Zone BAX site is partially located within the Jarvis Creek floodplain and both the BAX and CACTF sites contain wetlands.[2]

Pursuant to Executive Orders 11988 (Floodplain Management) and 11990 (Protection of Wetlands), in order for the Army to construct the BAX and CACTF ranges in a floodplain or wetlands, it must find that there are no practicable alternatives to doing so, and that all practicable measures have been taken to minimize harm to the floodplain and wetlands. The practicability of a given alternative or measure is evaluated by considering such pertinent factors as community welfare, cost, environmental impact, and technological feasibility, in light of the overall project purposes.

All alternative locations for the BAX and CACTF contain a large amount of wetlands, thus no alternative presents a practicable means of avoiding wetlands impacts entirely. However, as discussed in more detail below, selection of Eddy Drop Zone (Alternative 2) would result in the minimization of impacts to wetlands. Therefore, this finding focuses on evaluating the practicability of constructing the BAX at the North Texas Range location (under either Alternatives 4 or 5), since North Texas Range is the only proposed location that is outside of a floodplain.[3] In evaluating the practicability of North Texas Range, significant factors include: cost; impacts to the aquatic ecosystem; and bison-related impacts, including legal obligations to the Delta bison herd management program and impacts to Army training exercises.

Cost

The cost of building the proposed ranges at the North Texas Range site, under either Alternative 4 or 5 of the SDEIS, is unreasonably excessive. The estimated construction costs of Alternatives 4 and 5 are approximately $128 million and $170 million, respectively, compared to $69 million for Alternative 2 (Eddy Drop Zone).

Several factors at the North Texas Range location contribute to the higher costs of Alternatives 4 and 5, including: greater distance to gravel sources and electrical power; large amounts of

[1] The Army will not make a final site selection until it reviews and considers all public comments on the SDEIS and this draft finding and issues a record of decision in this matter after the Final EIS is completed. For purposes of this draft finding only, it is assumed the Army will ultimately select the Eddy Drop Zone location (Alternative 2) since it is currently the Army's preferred alternative.

[2] For a detailed discussion regarding floodplain and wetlands impacts at the alternative locations, see Supplemental Draft EIS (SDEIS), Sections 4.2.2 and 4.3.3, respectively.

[3] The Eddy Drop Zone BAX site (Alternative 2) and Donnelly Drop Zone BAX and CACTF sites (Alternative 3) are partially located in the Jarvis Creek and Ober Creek floodplain; whereas the North Texas Range BAX site (Alternatives 4 and 5) and all of the remaining CACTF sites (Alternatives 2, 4 and 5) are not located in a floodplain.

wetlands; poor soil conditions, including very high amounts of permafrost; and the need to relocate facilities operated by the Army's Cold Regions Test Center. Alternative 5 (for which the BAX and CACTF would be split-located at different sites) would experience additional costs associated with the need to duplicate certain utility lines, roads, and facilities that would otherwise be shared by the BAX and CACTF under the other alternatives.

Aquatic Ecosystem

Excessive amounts of wetlands and permafrost at the North Texas Range site make it unfeasible for a variety of reasons.[4] The construction and maneuver areas for Alternatives 4 and 5 contain a total of 1270 and 1342 acres of wetlands, respectively, compared to 484 acres for Alternative 2. Of these, 281 and 319 acres of wetlands would need to be filled during construction to meet design and maneuverability requirements for Alternatives 4 and 5, respectively, compared to only 24 acres for Alternative 2.[5] Additionally, permafrost soils are estimated to comprise approximately 66 and 51 percent of the BAX construction and maneuver areas for Alternatives 4 and 5, respectively, compared to only 16 percent for Alternative 2.[6]

In addition to contributing to higher construction costs as discussed above, the large amounts of wetlands and permafrost at the North Texas Range site would require more maintenance efforts and associated costs. Furthermore, both mounted (vehicle) and dismounted (on foot) maneuvers would be excessively impeded by the wetland-rich environment. Moreover, given the great disparity in the amount of wetlands and permafrost that would be impacted at the North Texas Range location as compared to the Eddy Drop Zone location, the North Texas Range location (Alternatives 4 and 5) would likely have a substantially greater overall impact on the aquatic ecosystem.[7]

Bison

If the proposed ranges were to be located at the North Texas Range location under either Alternative 4 or 5 of the SDEIS, training exercises would likely suffer unacceptable disruptions due to the presence of the Delta bison herd. Large numbers of bison are present within and adjacent to the site and its associated surface danger zones between mid-February and mid-August of each year. An estimated 70% of the herd uses the area during late winter pre-calving (March and April) and during calving (April through June). Additionally, from June through mid-August large numbers of bison forage within the uplands of North Texas Range, where food plots

[4] For a detailed discussion regarding permafrost impacts at the alternative locations, see SDEIS, Section 4.2.1.

[5] All practicable measures would be taken to minimize impacts to permafrost and wetlands. See SDEIS, Sections 4.2.1.2 and 4.3.3.2, respectively, for lists of mitigations measures that would be taken.

[6] Permafrost soils are estimated to comprise approximately 59 percent of the CACTF construction and maneuver area for Alternative 4, compared to 9 percent for the Alternative 2 and 5 CACTF site (which is the same for both).

[7] Studies of aufeis flooding (see SDEIS, Sections 3.2.2.1.1 and 4.2.2.1.4) conclude that the design of the BAX would not produce any discernable change to flood water travel through the Eddy Drop Zone site, and would incorporate flood proofing measures to the extent practicable in order to minimize impacts to flooding and the floodplain (see SDEIS Section 4.2.2.2 for a list of mitigations measures that would be taken). The timing of peak flows and water velocities would remain unchanged. The natural, historical occurrence of Jarvis Creek spring flooding due to aufeis accumulation would still occur, and it would be conveyed along its natural path. Although flows would be concentrated at select points and would effectively increase the velocity within the BAX facility itself, as this flow exits the BAX construction footprint and maneuver area the downstream vegetation would return the velocities to existing levels. Thus, Delta Junction's flooding would not be exacerbated or otherwise altered by locating the BAX at the Eddy Drop Zone site.

created in 1988 are maintained in an attempt to entice the bison to stay in the area throughout the summer. Furthermore, bison habitat would be enhanced by the proposed action, as cleared areas around construction sites would be planted and maintained in native grasses. The grasses would likely be used as forage by bison and serve to increase the amount of time they spend within the area.[8]

The Army is legally obligated to minimize disruption to the Delta bison herd. The Army's current withdrawal of the land from Congress is conditioned upon the Army's agreement to "... not conduct activities or operations in or near bison habitats ..." from mid-February through early September when bison are present in order to minimize adverse effects on bison during this minimum disturbance period.[9] This obligation stems from the terms of the original permit issued to the Army by the U.S. Department of the Interior in 1950 allowing use of the Donnelly Training Area, whereby the Army was required to minimize disturbance to the bison herd caused by training maneuvers.[10]

As a consequence, the presence of bison within the site has the potential to limit, if not prevent range operations at any time the herd is present, generally between mid-February and mid-August of each year.[11] Additionally, due to the uncertainty of range availability during this period of time, the scheduling of training exercises would be severely frustrated. For example, because of the logistics and cost associated with a typical 15-day deployment of a battalion (approximately 800 soldiers) to the Donnelly Training Area for training exercises, there must be a fairly high degree of certainty that the proposed ranges will be available for use. However, given the expected presence of bison, North Texas Range can't provide reasonable assurance of range availability during the spring and summer months.

Conclusion

Based on the pertinent considerations discussed herein, the Army hereby finds that there are no practicable alternatives to constructing the BAX and CACTF ranges at the Eddy Drop Zone location (Alternative 2).[12] Furthermore, pursuant to Executive Orders 11988 and 11990, the Army will take all practicable measures to minimize potential harm to or within the floodplain and wetlands at the Eddy Drop Zone location.

[8] For a detailed discussion regarding bison impacts at North Texas Range, see SDEIS, Section 4.2.6.1.6.

[9] Alaska Army Lands Withdrawal Renewal, Legislative Environmental Impact Statement, page 4-48.

[10] Permit dated November 7, 1950, from the Assistant Secretary of the Interior to the Secretary of the Army.

[11] Attempts to relocate the herd from the area may be too disruptive to the herd to be permissible and would have dubious chances of success.

[12] See footnote 1.

THIS PAGE INTENTIONALLY LEFT BLANK.